

"Von den Bussarten."

- Pl. 15. *Falco Bassus*. Bacha. p. 55. *Falco bacha* Daudin, 1800.
16. *F. Rufofuscus*. Rounoir. 59. *Buteo jakal* Daudin, 1800.
17. *F. Rufocanus*. Rougre. 62. *Falco desertorum* Daudin,
1800. *
18. *Falco ocreatus*. Buse gantée. 63. *F. lagopus* Gmelin, 1788.

The specific names given to nos. 10, 15, 16, and 17 appear to be the earliest for their respective species, and should be adopted.

NOTES ON THE RACES OF *QUISCALUS QUISCALUS* (LINNÆUS).

BY HARRY C. OBERHOLSER.

ACCORDING to the views of current authors there are three subspecies of our common Grackle, *Quiscalus quiscula* (Linnæus). Since, as Mr. A. T. Wayne has recently shown,¹ the *Gracula quiscula* of Linnæus² is properly applicable to the Florida Grackle (*Quiscalus quiscula aglæus*), and the Purple Grackle needs another name, it may be worth while to present a few notes on all the forms of the species, with a revised statement of the geographic distribution of each.

Quiscalus quiscula quiscula (Linnæus).

[*Gracula*] *quiscula* LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 109 (based on *Monedula purpurea* Catesby, Nat. Hist. Carolina, Florida, and Bahama Islands, I, 1731, p. 12, pl. XII; and *Merops niger, viridi-argentea* Brown, Nat. Hist. Jamaica, 1756, p. 476) ("Habitat in America septentrionali").

[*Oriolus*] *ludovicianus* GMELIN, Syst. Nat., I, i, 1788, p. 387 (based on *Cassique de la Louisiane*, Buffon, Hist. Nat. des Ois. [original edition], III, p. 242; Planch. Enlum., No. 646) (partial albino) (Louisiana).

¹ The Auk, XXXV, No. 4, October, 1918, p. 440.

² Syst. Nat., ed. 10, I, 1758, p. 109.

Sturnus quiscula DAUDIN, *Traité Élém. et Compl. d'Ornith.*, II, 1800, p. 316 (= *Gracula quiscula* Linnæus).

Gracula quiscula WILSON, *Amer. Ornith.*, III, 1811, p. 44, pl. XXI, fig. 4 (= *Gracula quiscula* Linnæus).

Quiscalus versicolor VIEILLOT, *Nouv. Dict. d'Hist. Nat.*, XXVIII, 1819, p. 488 (Greater Antilles to Hudson Bay) (nom. nov. pro *Gracula quiscula* Latham. *Ind. Ornith.*, I, 1790, p. 191, quæ *Gracula quiscula* Linnæus).

Qu[iscalus], *nitens* LICHTENSTEIN, *Verz. Doubl.*, 1823, p. 18 (nom. nov. pro *Gracula quiscula* Linnæus et *Sturnus quiscula* Daudin).

Qu[iscalus], *purpureus* STEPHENS, in Shaw, *Gen. Zool.*, XIV, pt. 1, 1826, p. 48 (based on *Gracula "quiscula"* [= *quiscula*] Shaw, *Gen. Zool.*, VII, 1809, p. 458 [= *Gracula quiscula* Linnæus]; and on Wilson, *Amer. Ornith.*, III, p. 44, pl. XXI, fig. 4) ("South" [= North] America).

Quiscalus purpuratus SWAINSON, *Anim. in Menag.*, 1838, p. 298 (North America).

Quiscalus aglaus BAIRD, *Amer. Journ. Sci. and Arts*, ser. 2, XLI, 1866, p. 84 (based on *Quiscalus baritus* Baird, *Rep. Explor. and Surv. R. R. Pac.*, IX, 1858, p. 556; Cape Florida, Florida).

Qu[iscalus], *versicolor typicus* RIDGWAY, *Bull. U. S. Nat. Mus.*, No. 50, pt. II, 1902, p. 217 (Selater MS.) (in synonymy).

CHARS. SUBSP.—Size small; back, scapulars, and lower parts nearly uniform dull olive or bottle green.¹

TYPE LOCALITY.—Coast of South Carolina.²

GEOGRAPHIC DISTRIBUTION.—Resident in the southern part of the southeastern United States. Breeds north to the coast of South Carolina, southern Georgia, southern Alabama, and southern Mississippi; west to eastern Louisiana; south to the coast of the Gulf of Mexico, from eastern Louisiana to southern Florida; and east to the Atlantic coast of Florida, Georgia, and South Carolina.

REMARKS.—The individual variation in this race is not nearly so great as in the form of the species breeding in the Middle Atlantic States. Its usual coloration is much like the dark green-backed phase of the latter. It has, however, what might be considered two phases of plumage, in one of which the head is bluish, especially anteriorly, in the other purplish; the head is apparently very rarely, if ever, green. In some specimens the median posterior lower parts show some blue or purplish; and the upper parts are occasionally more or less obscurely barred with the same, particularly on the posterior portion. These variations are, of course,

¹ For measurements of this race, cf. Ridgway, *Bull. U. S. Nat. Mus.*, No. 50, pt. II, 1902, pp. 217-218.

² Designated by Wayne, *The Auk*, XXXV, No. 4, October, 1918, p. 440.

in the direction of the common Purple Grackle, but are never so pronounced as in that form.

From the data given by Mr. Wayne,¹ there seems to be no doubt of the correctness of his conclusions regarding the proper application of the name *Gracula quiscula* Linnæus to the bird commonly called *Quiscalus quiscula aglæus* Baird. As Mr. Wayne has shown, the *Gracula quiscula* of Linnæus² was based chiefly on Catesby's *Monedula purpurea*, "the Purple Jack Daw."³ In determining to which of the subspecies this description of Catesby's applies, we can get no assistance whatever from Catesby's figure, and we are obliged, therefore, to determine its application by the text. This, again, is not very satisfactory, but in view of the fact, brought out by Mr. Wayne, that the Purple Grackle is almost unknown in the coast region of South Carolina where Catesby's work was done, and where, as his text indicates, he observed the birds from which his figure was drawn, it would seem improper to fix the name on any other than the breeding bird of this region. This involves, of course, the relegation of *Quiscalus aglæus* Baird to synonymy, since the latter name thus applies to the same bird as *Gracula quiscula* Linnæus. The *Merops niger, viridi-argentea* of Brown,⁴ which Linnæus cites in his synonymy, and which is, of course, *Holoquiscalus jamaicensis* (Daudin), may properly be ignored in this connection, since it clearly does not figure in either Linnæus' diagnosis or his comments.

The *Gracula quiscula* of Wilson⁵ is merely a misspelling of *Gracula quiscula* Linnæus, as is shown by the synonymy quoted; and the same applies to *Sturnus quiscula* Daudin.⁶ The *Quiscalus versicolor* of Vieillot⁷ is merely a new name for *Gracula quiscula* Latham (= *Gracula quiscula* Linnæus), as the synonymy and range (Greater Antilles to Hudson Bay) clearly indicate. Lichtenstein's *Quiscalia nitens*⁸ is merely a new name for *Gracula quiscula* Linnæus and *Sturnus quiscula* Daudin, and is, of course, of identical

¹ *Loc. cit.*

² *Syst. Nat.*, ed. 10, I, 1758, p. 109.

³ *Nat. Hist. Carolina, Florida, and Bahama Islands*, I, 1731, p. 12, pl. xii.

⁴ *Nat. Hist. Jamaica*, 1756, p. 476.

⁵ *Amer. Ornith.*, III, 1811, p. 44, pl. XXI, fig. 4.

⁶ *Traité Élém. et Compl. d'Ornith.*, II, 1800, p. 316.

⁷ *Nouv. Dict. d'Hist. Nat.*, XXVIII, 1819, p. 488.

⁸ *Verz. Doubl.*, 1823, p. 18.

application. The *Quiscalus purpureus* of Stephens¹ is based on the *Gracula quiscula* of Shaw,² and on Wilson's *Gracula quiscula*,³ both of which are, of course, the same as *Gracula quiscula* Linnæus. Also, *Quiscalus purpuratus* Swainson,⁴ if, indeed, applicable to this species, must be considered a synonym of *Gracula quiscula* Linnæus. The case of *Quiscalus versicolor typicus* is, however, somewhat more complicated. This name was first used by Dr. Selater,⁵ not as a subspecific name, but to indicate the typical form of *Quiscalus versicolor* [*i. e.*, *Quiscalus quiscula*], as was the common practice at that time, instead of repeating the specific name as we do now, and, therefore, cannot be considered to have nomenclatural status as a subspecific designation. Moreover, Selater includes in the range of his *Quiscalus versicolor typicus* part of the range of the southern bird, and further indicates by his text that he did not intend the subspecific term "*typicus*" as a new name, but merely to indicate the typical form of the species as distinguished from the two other subspecies.⁶

Mr. Ridgway,⁷ however, has cited it in his synonymy of *Quiscalus quiscula quiscula* as though it had regular standing, so the name, consequently, must date from his introduction, and become a synonym of *Gracula quiscula* Linnæus.

From the above discussion it is seen that all the names applied to birds from the southeastern United States are clearly referable to the Florida race heretofore called *Quiscalus quiscula aglæus*, but which now must stand as *Quiscalus quiscula quiscula*, and that the bird heretofore known as *Quiscalus quiscula quiscula* must have a new name.

Quiscalus quiscula ridgwayi, nom. nov.⁸

Quiscalus quiscula quiscula Auct., nec Linnæus.

CHARS. SUBSP.—Similar to *Quiscalus quiscula quiscula*, but larger,

¹ In Shaw, Gen. Zool., XIV, pt. 1, 1826, p. 48.

² Gen. Zool., VII, 1809, p. 458.

³ Amer. Ornith., III, 1811, p. 44, pl. XXI, fig. 4.

⁴ Anim. in Menag., 1838, p. 298.

⁵ Cat. Birds Brit. Mus., XI, 1886, p. 394.

⁶ Cat. Birds Brit. Mus., XI, 1886, pp. 394-395.

⁷ Bull. U. S. Nat. Mus., No. 50, pt. II, 1902, p. 217.

⁸ I take pleasure, as a slight token of affection and esteem, in dedicating this familiar bird to Mr. Robert Ridgway, whose contributions to the study of this group are well known.

excepting the bill and feet; upper and lower parts usually much more purplish, and barred or mottled with metallic green or blue.

DESCRIPTION.—Type, adult male, Washington, D. C., March 30, 1912; H. H. T. Jackson. Forehead between metallic fluorite violet and blackish violet, shading to blackish purple, with bronzy reflections on cervix, sides of head and of neck; lores velvet black with a greenish or bluish sheen; back, scapulars, and sides of breast, metallic greenish bronze mixed with metallic purplish bronze, marine blue, and blackish purple; rump purplish bronze; upper tail-coverts deep blackish purple with deep blue and bronze reflections; tail varying from metallic blackish dusky violet to deep metallic indigo blue, the margins of the inner webs of the feathers brownish black; wings brownish black with a faint bluish green or purplish sheen, but the exposed surfaces of tertials, greater, median, lesser, and the inner primary coverts, together with the outer edges of the secondaries, of the same color as the cervix, the basal portion of the outer margin of the primaries with a pronounced metallic greenish blue gloss, this becoming more purplish on the inner primaries; outer edge of alula deep dusky dull bluish green; chin and throat like the cervix, but the extreme anterior part of the chin decidedly deep metallic bluish; jugulum and sides of throat, purplish bronze; rest of lower parts metallic deep dusky dull violet, but the sides and flanks decidedly bronzy, and the middle of the abdomen dull black with little metallic sheen; lining of wing black with greenish, bluish, and purplish reflections. Wing, 144 mm.; tail, 136 mm.; exposed culmen, 30.5 mm.; tarsus, 33.5 mm.; middle toe without claw, 25 mm.¹

TYPE LOCALITY.—Washington, D. C.

GEOGRAPHIC DISTRIBUTION.—Middle eastern United States. Breeds north to southern Rhode Island, southern Connecticut, southeastern New York, and northeastern Pennsylvania; west to central Pennsylvania, extreme western Maryland, eastern West Virginia, southeastern Kentucky, central Tennessee, and northern Mississippi; south to central Mississippi, central Alabama, and northern South Carolina; and east to central North Carolina and the Atlantic coast from Virginia to Rhode Island. Winters south to southern Louisiana, southern Alabama, southern South Carolina, and probably to Florida.

REMARKS.—In color this race is exceedingly variable. Dr. F. M. Chapman has so fully treated² its color variations that no detailed description of these is here necessary. He distinguished three color phases: (1) the bottle green, (2) the bronze purple, (3) the brassy bluish green; but we should rather consider that there are four such color phases, as follows: (1) bottle green, (2) bronze

¹ For further measurements of this subspecies, cf. Ridgway, Bull. U. S. Nat. Mus., No. 50, pt. II, 1902, pp. 215-216.

² Bull. Amer. Mus. Nat. Hist., IV, Feb. 25, 1892, pp. 1-20.

purple, (3) purplish blue or bluish purple, (4) shining metallic green, the last of which seems to be of rather rare occurrence. The head, rump, and lower parts each have four similar color phases. In many cases, in the same individual, these do not all correspond with the color phases of the back. Consequently the intermediates between these phases and the various combinations of colors on the different parts of the bird, together with the absence or presence of bars on the upper and lower parts, make a bewildering variety of coloration. In fact, no two specimens appear to be exactly alike.

The geographic distribution of this race is confined in general to the region east of the Allegheny Mountains, but in the south it is extended considerably farther west. Birds from Garret County on the Alleghenian plateau in extreme western Maryland are intermediates between *Quiscalus quiscula ridgwayi* and *Quiscalus quiscula æneus*, and represent there the extreme western limit of the former.

Quiscalus quiscula æneus Ridgway.

Quiscalus æneus RIDGWAY, Proc. Acad. Nat. Sci. Philadelphia, XXI, June (= July), 1869, p. 134.

CHARS. SUBSP.— Similar to *Quiscalus quiscula ridgwayi*, but somewhat smaller, and with posterior upper and lower parts uniform brownish bronze, without differently colored bars.¹

TYPE LOCALITY.— Mount Carmel, Wabash County, southeastern Illinois.

GEOGRAPHIC DISTRIBUTION.— Central and eastern North America. Breeds north to central Labrador, James Bay in northern Ontario, Fort Churchill in northern Manitoba, and to southern Mackenzie; west to southwestern Mackenzie, western Alberta, western Montana, western Wyoming, central Colorado, northwestern and west central Texas; south to central southern Texas, northern Louisiana, western Tennessee, central Kentucky, central West Virginia, southwestern Pennsylvania, southwestern and central New York, northern Connecticut, and northern Rhode Island; east to eastern Massachusetts, eastern Maine, Nova Scotia, and eastern Newfoundland. Winters south to southern Louisiana, southern Alabama, southern South Carolina, and probably to Florida.

¹ For measurements of this race, cf. Ridgway, Bull. U. S. Nat. Mus., No. 50, II, 1902, p. 219.

REMARKS.—This subspecies differs from both the other forms of the species in its brownish bronze upper parts. Except for the color of the head, it is very uniform, but this part might be considered to have three color phases: (1) purple, (2) blue, (3) green, all of which are connected by intermediates.

So far as the actual amount of difference in typical specimens is concerned, it might well be called a species, but it so completely intergrades at different points with *Quiscalus quiscula ridgwayi*, that it seems best treated as a subspecies. At some other point or points it abuts on either *Quiscalus quiscula ridgwayi* or *Quiscalus quiscula quiscula*, and the lack of actual intergradation in such places does not necessarily indicate that it is a distinct species, because this condition is well known to exist in many races of other species, between which, however, intergradation does occur at other points. Nor can the fact that more or less typical specimens of each of two intergrading forms occur in the same breeding locality be considered as evidence of hybridism, since many subspecies are known to intergrade in this way. In fact, a perfectly gradual intergradation over a geographic area is rather the exception, since the individual variation in two forms often produces considerable irregularity. This is frequently the case even when the ranges do not actually meet, and such individual variation must, in itself, of course, be considered intergradation.